

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-019-2(50)	2006	4	43

NOTES FOR CONSTRUCTION WITHIN THE STATE RIGHT-OF-WAY

1. The Contractor shall obtain a Permit from the State Highway Division, Hawai'i District Engineer, at 50 Makaala Street, Hilo, HI 96720, prior to commencement of work within the state highway right-of-way.

2. Construction and restoration of all existing highway facilities within State right-of-way shall be done in accordance with all applicable sections of the current Standard Specifications for Road and Bridge Construction, and the Specifications for Installation of Miscellaneous Improvements Within State Highways, of the State Department of Transportation's Highways Division.

3. All lanes shall be open to Traffic during the morning peak hours from 6:30 a.m. to 8:30 a.m. and during the afternoon peak hours from 3:30 p.m. to 5:30 p.m., and during off-work hours. Only one lane of traffic shall be closed at any other time.

4. The Contractor shall provide, install, and maintain all necessary signs, lights, flares, barricades, markers, cones, and other protective facilities and shall take all necessary precautions for the protection, convenience, and safety of the traveling public. All such protective facilities and precautions shall conform with the "Administrative Rules of Hawai'i Governing the Use of Traffic Control Devices at Work Sites on, or Adjacent to, Public Streets and Highways", adopted by the Director of Transportation, and the current U.S. Federal Highway Administration "Manual on the Uniform traffic Control Devices for Streets and Highways, Part VI - "Standards and Guides for Traffic Controls for Streets and Highway Construction, Maintenance, Utility, and Incidental Management Operations"". If lane closures are required during construction, a traffic control plan as shown on Section 645 of the project specifications must be approved by the division prior to the issuance of the permit.

5. Unless otherwise noted on the plans, the minimum pavement structure shall consist of:

2-1/2" Asphaltic Concrete (Mix No.IV),  
8" Aggregate Base Course,  
and 12" Subbase Course.

6. No material and/or equipment shall be stockpiled or otherwise stored within highway right-of-way, except at locations designated in writing and approved by the Hawai'i District Engineer.

7. Longitudinal drainage along the highway shall be maintained at all times.

8. Pavement striping shall be done by the Contractor.

9. Approval of permit construction plans shall be valid for a period of one year thereof from the date of notification of approval to the applicant. In the event construction does not commence within this one year period, the applicant will be required to resubmit his construction plans for DOT State Highways, Hawai'i District for review and approval.

10. All regulatory, guide, construction signs and barricades shall be of high intensity reflective sheeting.

11. Unprotected pavement drop offs greater than 2" within 8 feet of the travelway shall not be allowed during non-working hours, except where approved by the Engineer in writing.
12. Free flow of traffic shall be maintained in both directions at all times. Temporary stoppages require advance approval in writing from the Hawai'i District's Engineering Program Manager and a Notice to Motorists may be required. Submit the notice to the State Highways Division - Hawai'i District for review and acceptance a minimum of 6 weeks prior to publication.

13. Clear shoulder areas shall be maintained for bicyclists and pedestrian traffic at all times. If one shoulder is to close, appropriate signs shall be posted directing bicyclists and pedestrians to use alternate shoulder area.

14. Contractor shall provide State Highway's - Hawai'i District with "As Built" drawings upon completion of the work.

15. Existing highway drainage systems shall remain functional at all times.

16. The Contractor shall be responsible for, and repair all damage caused by the Contractor's operations. Any such repair work shall be done by the Contractor at no additional cost to the State. Damages to any existing facilities shall be immediately reported to the respective utility companies, City or State agency.

17. Contractor shall inform the State permit office, (808) 933-8866, at least two(2) days prior to closing any lanes.

18. The contractor shall reference to the satisfaction of the District Engineer, all existing traffic signs, posts and pavement markings prior to commencement of construction. The contractor shall replace or repair all traffic signs, posts and pavement markings disturbed by his activities, unless directed otherwise by the District Engineer or his representative.

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REVISED:

DATE:  
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FILE:

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTEBOOK	
No.	

NEIL S. FUKUNOTO  
LICENSED  
PROFESSIONAL  
ENGINEER  
No. 6186-C  
HAWAII U.S.A.

This work was prepared by me  
or under my supervision.  
Exp. 04-30-08  
  
Wesley R. Segawa & Associates, Inc.

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**CONSTRUCTION NOTES**  
  
**REMOVAL OF HALAULANI BRIDGE**  
**Hawaii Belt Road**  
**Federal Aid Project No. BR-019-2(50)**  
Scale: AS NOTED      Date: July, 2006

COUNTY DEPARTMENT OF WATER SUPPLY NOTES

- 1. All Work shall conform to the Department of Water Supply's (DWS) "Water System Standard", Volumes I and II, dated 1985, as amended.
- 2. The Contractor shall inform the D.W.S. Engineer 72 hours prior to the beginning of any waterline work and one week prior to any connection, chlorination, shut off or relocation work.
- 3. All work, equipment, and materials furnished by the D.W.S. shall be paid for by the Contractor.
- 4. All existing waterlines, waterline appurtenances, and other utilities shown on the plans reflect the most recent information made available to this Department. The Contractor shall be responsible for verification of the exact location of all existing utilities in the field, whether shown on the plans or not. The Contractor shall bear all cost for damages done unto the affected utilities.
- 5. Where water shut off of more than 3 hours becomes necessary, the Contractor, at his own cost, shall provide a temporary by-pass line. The by-pass shall be determined by the D.W.S. Engineer. If necessary, the D.W.S. Engineer may require a by-pass line, regardless of the expected water shut off period.
- 6. Minimum horizontal clearance between waterline and other utilities shall be 8 feet unless otherwise specified. Minimum vertical clearance between waterlines and other utilities shall be 12" provided concrete jackets are used, and 18" if no concrete jackets are used.
- 7. Relocation of existing meters shall be done under D.W.S. supervision. Relocation of customer service lines to relocated meters shall be done by the Contractor. Materials used to connect customer lines to relocated meters shall be new 3/4" copper, Type K. All work and materials required shall be provided by the Contractor and considered incidental to the various contract items. Existing meter boxes damaged by the Contractor shall be replaced at the Contractor's cost. A dielectric union shall be used to connect the copper pipe to the customer's G.I. line.
- 8. When compaction test(s) are required for the project, the Contractor shall be responsible to provide the D.W.S. with proctor results of materials to be used for that portion of work requiring compaction. These results shall be certified, and shall be furnished to D.W.S. one week prior to commencement of work.
- 9. The Contractor shall inform the customers 24 hours in advance of water shut-off to complete new service connection to the customers' line.
- 10. Solder and flux used shall contain nor more than 0.2% lead.
- 11. Pipe cushion material for copper pipes shall be No. 4 fine manufactured sand.
- 12. Service laterals shall be flushed by the Contractor under D.W.S. supervision.
- 13. Water System Standards, Volume 2, Plate 77-Type A Valve Box for Curb Stop on multiple copper service shall be deleted.

COUNTY GRADING NOTES

- 1. All grading work shall conform to Chapter 10 of the Hawaii County Code. Should a grading permit be required, no work shall commence until the Department of Public Works (DPW) approves a grading permit.
- 2. The Contractor shall remove all silt and debris deposited in drainage facilities, roadways and other areas resulting from his work. The costs incurred for any necessary remedial action by the DPW shall be payable by the Contractor.
- 3. The Contractor, at his own expense, shall keep the project and surrounding areas free from dust nuisances. The work shall be in conformance with the Air Pollution Control rules of the State Department of Health, HAR 11-60.1, Fugitive Dust.
- 4. All grading operations shall be performed in conformance with the applicable provisions of the Hawaii Administrative Rules, Title 11, Chapter 55, Water Pollution Control and Chapter 54, Water Quality Standards, and to the Erosion and Sedimentation Control Standards and Guidelines of the Department of Public Works, County of Hawaii.
- 5. The Contractor shall sod or plant all slopes and exposed areas immediately after the grading work has been completed.
- 6. Fills on slopes steeper than 5:1 shall be keyed.
- 7. The Contractor shall inform the DPW of the location of the disposal and/or borrow site(s) required for this project when an application for a grading permit is made. the disposal and/or borrow site(s) must also fulfill the requirements of the grading ordinance.
- 8. No grading work shall be done on Saturdays, Sundays and holidays anytime without prior approval from the Department of Public Works. Grading work on normal working days shall be between the hours of 7:00 a.m. to 3:30 p.m.
- 9. Fills shall be compacted to 90 percent (90%) of maximum density per ASTM D-1557 test.
- 10. The Contractor shall remove all vegetation before placing fills on natural ground surface.

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DATE: SCALE: FILE:

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
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NOTEBOOK	DESIGNED BY	
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No.		

NEAL S. FUKUNOTO

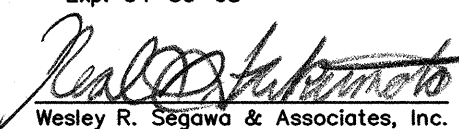
LICENSED PROFESSIONAL ENGINEER

No. 6186-C

HAWAII U.S.A.

This work was prepared by me or under my supervision.

Exp. 04-30-08



Wesley R. Segawa & Associates, Inc.

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

CONSTRUCTION NOTES

REMOVAL OF HALAULANI BRIDGE

Hawaii Belt Road

Federal Aid Project No. BR-019-2(50)

Scale: AS NOTED

Date: July, 2006



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
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NOTES FOR WORK WITHIN THE COUNTY RIGHT-OF-WAY

- All work shall be done in accordance with the County of Hawaii, Department of Public Works "Standard Details for Public Works Construction", dated September, 1986, and "Standard Specifications For Public Works Construction", dated September, 1984.
- The Contractor shall verify the location of all existing utilities whether shown on the plan or not, and shall be responsible for the repair or replacement of same in the event of damages due to his construction practices to existing condition or better. The Contractor shall also coordinate his work with the respective utility companies as required.
- The Contractor shall provide and install all traffic control devices in conformance with the current edition of the "Manual On Uniform Traffic Control Devices For Streets and Highways", and as directed by the Department of Public Works.
- The Contractor shall notify the Department of Public Works 48 hours before the commencement of any utility line work to schedule a field review and secure approval of the proposed utility line location within the County Right-of-Way.
- The proposed utility line location shall be laid out in the field prior to the conducting of the field review by the Department of Public Works.
- Field adjustments shall be made as directed by the Department of Public Works prior to the commencement of any utility line work.
- The required permit under Chapter 22, Article 3, Section 22-44 of the Hawaii County Code shall be obtained from the Department of Public Works by the Contractor for work within the County Right-of Way.
- The Contractor shall provide at least one (1) lane for traffic movement at all times. Two (2) lanes of traffic movement shall be provided between the hours of 3:30 p.m. to 8:00 a.m.
- The existing pavement shall be saw cut before commencement of work.
- Any pavement outside the contract zone limits damaged as a result of construction operations shall be restored to its original, or better condition. Such restoration shall be to satisfaction of the Department of Public Works.
- A temporary cold mix patch shall be applied immediately upon completion of backfilling operations and shall be maintained until a permanent patch is authorized by the Department of Public Works.

- Any pavement markings, structures, and appurtenances damaged by the utility line installation shall be repainted or reconstructed as directed by the Department of Public Works.
- No trenching shall be left open for more than five (5) working days.
- Should trenching occur through an existing sidewalk or should damages occur to the sidewalk as a result of trenching, the following procedure shall be utilized to repair the sidewalk:
  - All portland cement concrete to be removed shall first be saw cut with a concrete saw that has a diamond or carborundum abrasive wheel. Those cuts shall be made to a depth equal to at least one-fourth of the depth of the slab, or enough as is deemed necessary by the Department of Public Works, to permit breaking out the balance of the concrete without spalling off the exposed edges of the slab left in place.
  - If any block is touched, the whole block shall be removed and later replaced, unless minor variation is authorized by the Chief Engineer or his representative.
  - Any damages to adjacent areas due to settlement or to any other effects whatsoever caused by the trench construction shall be properly repaired and corrected.
  - All other incidental work shall be satisfactorily performed to effect the proper restoration of the sidewalk area.
  - Should damage to a sidewalk, curb and/or gutter at a location where a curb ramp should exist, or to a driveway that does not meet with the requirements of the Americans with Disabilities Act (ADA), repair work shall include the construction of a curb ramp, or reconstruction to the driveway such that the repair work complies with the ADA and meets with the approval of the DPW.
- The Permittee shall maintain, to the satisfaction of the Department of Public Works, the area worked within the Government Right-of-Way including any repairs to pavement and shoulder damage as a result of installation work, for a period of one (1) year from the date of final inspection, as noted by the Department of Public Works. The Permittee shall undertake repairs expeditiously, whenever directed by the Chief Engineer during the maintenance period.

NOTES FOR SOLID WASTE DEMOLITION/DISPOSAL

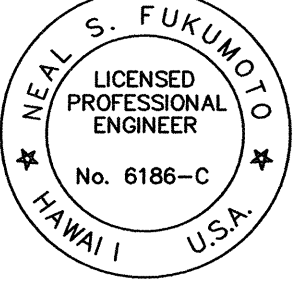
- Unless otherwise specified, the contractor shall be responsible for the proper handling, storage and/or disposal of all waste generated by this construction including grubbing and excess excavated materials. Any material brought to the county landfills will be subjected to the instituted tipping fee system, with no exceptions or exemptions.
- All wastes generated by construction, including grubbing, demolition and excess excavation material may be brought to the West Hawaii or the Hilo Landfill. Landfill fees shall be negotiated by Contractor and landfill management.

- Construction, demolition and grubbing material shall not be deposited at any of the county transfer stations, but shall be transported for disposal at either the West Hawaii or Hilo Landfill.
- Asbestos material must be separated, double bagged and landfilled in accordance with the regulations of the Solid Waste Division, Department of Public Works. Information may be obtained by calling West Hawaii Landfill at (808) 886-0940 between 7:00 A.M. and 4:00 P.M. Monday through Friday. If any asbestos material is encountered, Contractor shall follow all state and federal regulations, and in accordance with sections 660 and 661 of the project specifications.
- For West Hawaii Landfill:
  - All materials disposed of at the West Hawaii Sanitary Landfill shall follow federal, state and corporate guidelines. The Contractor shall consult with the West Hawaii Landfill for current tipping and special handling fees per truckload for any waste that require assistance with waste management equipment personnel for offloading.
  - Corporate requirements will vary based on waste. Empty drums, light fixtures, liquid restrictions and asbestos shall require proper paper work prior to disposal. The Contractor shall coordinate directly with the West Hawaii Landfill (Tel. No. 1-808-886-0940) for required paper work.
  - The Contractor shall consult with the West Hawaii Landfill for current tonnage and additional truckload fees for special handling on specific wastes. Truckload and tipping fees for each asbestos load will also be assessed.
  - All commercial haulers shall deliver only to the landfill sites and not to any transfer stations.
  - Department of Health, clean air branch regulates asbestos disposal. Waste Management requires a profile sheet completed for each job site where asbestos is removed and delivered to the West Hawaii landfill. In addition, a waste manifest sheet shall accompany the load upon transport to the West Hawaii Facility. Inspection of the load will be made and any regulations not meeting requirements will be cause for rejection of load.
  - For safety reasons, construction or demolition wastes such as metal or concrete, shall not exceed 6' lengths and widths.

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No. _____	DESIGNED BY _____	
	CHECKED BY _____	

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DATE: SCALE: FILE: \_\_\_\_\_

 <p>This work was prepared by me or under my supervision. Exp. 04-30-08 <i>Neal S. Fukumoto</i> Wesley R. Segawa &amp; Associates, Inc.</p>	<p>STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION</p> <p><b>CONSTRUCTION NOTES</b></p> <p><b>REMOVAL OF HALAULANI BRIDGE</b> <b>Hawaii Belt Road</b> <b>Federal Aid Project No. BR-019-2(50)</b></p> <p>Scale: AS NOTED      Date: July, 2006</p>
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HELCO NOTES

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-019-2(50)	2006	7	43

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- The location of HELCO's overhead and underground facilities shown on the plans are from existing records with varying degrees of accuracy and are not guaranteed as shown. The Contractor shall exercise extreme caution whenever construction crosses or is in close proximity of underground lines and shall maintain adequate clearance when operating equipment within or under any overhead lines.
  - The Contractor shall comply with the State of Hawaii's Occupational Safety and Health Law (HIOSH).
  - For verification of underground lines or for assistance in supporting and protecting these lines, the Contractor shall call HELCO's dispatch at 935-1171 a minimum of 72 hours in advance.
  - Any work required to relocate HELCO facilities shall be done by HELCO and the Contractor shall be responsible for all coordination, and for possible costs if applicable.
  - Should it be necessary to temporarily relocate any of HELCO facilities to enable the Contractor to perform his/her work in a safe and expeditious manner in fulfilling his/her contract obligations, these temporary relocations will be done by HELCO, with all cost borne by the Contractor.
  - Any unforeseen conflict that would result in the redesign or relocation (either temporary or permanent) of HELCO's electrical facilities may be cause for lengthy delays. To avoid such delays, the Contractor shall notify HELCO of the conflict a minimum of 60 days prior to the start of construction.
  - Any damage to HELCO's facilities shall be reported immediately to HELCO's trouble dispatcher at 935-1171.
  - All HELCO's overhead and underground facilities shall be protected at all times by the Contractor during construction. Costs for damages to HELCO facilities shall be borne by the Contractor. This repair work shall be done by HELCO.
  - The Contractor shall indemnify, defend and hold harmless HELCO from and against all losses, damages, claims and actions, all expenses incidental of such losses, damages, claims or action based upon or arising out of damage to property or injuries to persons, or other tortuous acts cause or contributed to by the Contractor's indemnity shall not be applicable to any liability upon the sole negligence of HELCO.

CONSTRUCTION NOTES FOR GAS FACILITIES

- The Gas Company gas pipelines in the project area, if any, are plastic coated and cathodically protected. The Contractor shall be extremely careful when working near these gas pipelines.
- Written clearances must be obtained from the Gas Company, Hilo Office, at least five (5) working days prior to starting excavation near these gas pipelines. The telephone number is 935-0021.
- Since gas line locations of field maps are approximate, the Contractor, after obtaining written clearance, shall call USA North a minimum of two (2) working days before starting excavation to arrange for field location of the existing gas pipelines. The telephone number is 1-800-227-2600.

- The Contractor shall excavate and backfill around gas pipelines in the presence of a representative of the Gas Company. All backfill within six inches of any gas pipelines shall be select cushion material approved by the Gas Company.
- For relocation of any gas pipeline, the Contractor shall notify the Gas Company five working days before starting work. The telephone number is 594-5574. The Contractor shall provide the necessary excavation and backfill, obtain traffic permits, and restore pavement, sidewalks, and other facilities. Any relocation of gas facilities shall be done by the Gas Company and paid for by the Contractor.
- The Contractor shall notify the Gas Company immediately after any damage has been caused to existing gas pipelines, coatings, or its cathodic protection devices. The telephone number is 935-0021, 24 hours a day. The Contractor shall be liable for any damage to the Gas Company facilities. Repair work on such damage shall be done by the Gas Company with payment for this work to be borne by the Contractor.
- Minimum vertical and horizontal clearance between the gas pipelines and other pipelines, conduits, duct lines, or other facilities shall be 12 inches. Adequate support and protection for gas pipelines exposed in the trench shall be provided by the Contractor and approved by the Gas Company.
- The Contractor shall work in an expeditious manner in order to keep the uncovered gas pipelines exposed for as short a period of time as possible.

VERIZON (TELEPHONE) GENERAL NOTES

- The location of Verizon's (formerly GTE Hawaiian Tel) existing telephone facilities are approximate only. The Contractor shall exercise extreme caution and shall maintain proper clearances whenever construction crosses or is in close proximity of Verizon facilities. Damages shall be reported immediately to Verizon at 933-6560 (Normal Working hours, Monday through Friday, except holidays).
- For underground cable locating and marking, five working days advance notice is required. Three working days advance notice is required for any inspection by a designated representative.
- The Contractor shall take necessary precaution not to damage any existing cables or conduits. Any work involving existing Verizon cables or conduits shall be done in the presence of a Verizon inspector or designated representative.
- The Contractor shall obtain a toning request from Verizon by calling 933-6494.
- The Contractor shall notify Verizon's inspector or designated representative a minimum 72 hours prior to excavation, bracing or backfilling of Verizon's structures or facilities.

- When excavation is adjacent to or beneath Verizon's existing structures or facilities, the Contractor shall:

A. Sheet and/or brace the excavation to prevent slides, cave-ins or settlements to ensure no movement to Verizon's structures or facilities.

B. Protect existing structures and/or facilities with beams, struts or underpinning while excavating beneath them to ensure no movement to Verizon's structures or facilities.

NOTES FOR PUBLIC HEALTH, SAFETY AND CONVENIENCE

- The Contractor shall observe and comply with all Federal, State and local laws required for the protection of public health and safety and environmental quality.
- The Contractor at his own expense, shall keep the project and its surrounding areas free from dust nuisance. The work shall be in conformance with the air pollution standards and regulations of the State Department of Health. The County or State may require supplementary measures as necessary.
- The Contractor shall provide, install and maintain all necessary signs, lights, flares, barricades, markers, cones, and other protective facilities and shall take all necessary precautions for the protection, convenience and safety of the public.
- The contractor shall obtain a community noise permit from the State Department of Health and other required pollution control plans as necessary.
- The Contractor shall remove all silt and debris deposited in drainage facilities, roadways and other areas resulting from his work. The costs incurred for any necessary remedial action by the State and County of Hawaii, Department of Public Works shall be payable by the Contractor.
- Non-compliance to any of the above requirements shall mean immediate suspension of all work and remedial work shall commence immediately. All costs incurred shall be billed to the permittee. Furthermore, violators shall be subjected to administrative, civil and/or criminal penalties.

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Wesley R. Segawa & Associates, Inc.

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